

**Reply to Monsalve on
"Mitochondrial DNA in Ancient
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Andrea K.C. Ribeiro-dos-Santos,¹
Sidney E.B. Santos,¹ Ana Lucia
Machado,² Vera Guapindaia,² and
Marco A. Zago³

¹Laboratory of Human Genetics, Federal
University of Pará, Belém, Brazil

²Museu Paraense Emílio Goeldi, Belém, Brazil

³Department of Medicine, Faculty of Medicine
of Ribeirão Preto, University of São Paulo,
Ribeirão Preto, Brazil

The results presented by Monsalve et al. (1996) are very interesting. We would have cited them in our article (Ribeiro-dos-Santos et al., 1996) if their work had been available, but their study was published after we had submitted our manuscript, and it had been accepted. We think that the most relevant point is that, although the two studies were carried out in different materials and under different experimental conditions, the results agree in two ways: a) the finding of seven transitions observed in Asian populations and b) the occurrence of some haplotypes that do not belong to the four mitochondrial lineages of contemporary Amerindians.

In addition, in our pre-Columbian Amazonian samples, we observed a C-T transition at position 16,278, which is present in Asian populations (Forster et al., 1996) and was found in two North-American tribes (Ward et al., 1991; Shields et al., 1993) and in a brain sample from Florida dated from 7,000

years BP (Hauswirth et al., 1994). Recently, Foster et al. (1996) compared the mtDNA of 472 Native Americans and 309 Asians, and they found evidence of at least six founder sequences that would have originated the haplogroups A1, A2, B, C, D1, and X. This last group, X, is characterized by the absence of the Dde I site at 1,715 and the C-T transition at position 16,278 that we found among the pre-Columbian Amerindians.

We think that the data demonstrate that the continuation and expansion of the research based on ancestral mtDNA of Amerindians could help answer questions related to the peopling of the Americas. Such research is especially useful to describe the extent of genetic diversity present before the 'bottleneck' introduced by the European colonization, which reduced the population to less than 5% of its original size.

LITERATURE CITED

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